

APPARATUS AND METHOD FOR ADAPTIVE, MULTIMODE DECODING

Abstract of the Disclosure

5 The present invention provides for adaptive and multimode decoding, in a data packet-based communication system, to provide improved received signal quality in the presence of burst erasures or random bit errors, with particular suitability for real-time, delay sensitive applications, such as voice over Internet Protocol. In the presence of burst erasures, the adaptive multimode decoder of the present invention provides burst erasure correction decoding, preferably utilizes a maximally short (MS) burst erasure correcting code, which has a comparatively short decoding delay. Depending upon the level of such burst erasures, different rate MS codes may be utilized, or other codes may be utilized, such as hybrid or multidescriptive codes. When no burst erasures are detected, the adaptive multimode decoder of the present invention provides random bit error correction decoding, in lieu of or in addition to corresponding burst erasure correction coding.